1600

RAW SEQUENCE LISTING   DATE: 04/27/2004
PATENT APPLICATION: **US/09/506,079H**   TIME: 09:52:36

Input Set : **A:\49321-16.ST25.txt**
Output Set: **N:\CRF4\04272004\I506079H.raw**

```
 3  <110> APPLICANT: Clinton, Gail M.
 4         Evans, Adam
 5         Henner, William D.
 7  <120> TITLE OF INVENTION: HER-2 BINDING ANTAGONISTS
 9  <130> FILE REFERENCE: 49321-16
11  <140> CURRENT APPLICATION NUMBER: US 09/506,079H
12  <141> CURRENT FILING DATE: 2000-02-16
14  <160> NUMBER OF SEQ ID NOS: 15
16  <170> SOFTWARE: PatentIn version 3.2
18  <210> SEQ ID NO: 1
19  <211> LENGTH: 79
20  <212> TYPE: PRT
21  <213> ORGANISM: Homo sapiens
24  <220> FEATURE:
25  <221> NAME/KEY: MISC_FEATURE
26  <222> LOCATION: (2)..(2)
27  <223> OTHER INFORMATION: Applicants herein disclose Thr and Ser sequence variants at
this
28         position
30  <220> FEATURE:
31  <221> NAME/KEY: MISC_FEATURE
32  <222> LOCATION: (5)..(5)
33  <223> OTHER INFORMATION: Applicants herein disclose Leu and Pro sequence variants at
this
34         position
36  <220> FEATURE:
37  <221> NAME/KEY: MISC_FEATURE
38  <222> LOCATION: (6)..(6)
39  <223> OTHER INFORMATION: Applicants herein disclose Pro and Leu sequence variants at
this
40         position
42  <220> FEATURE:
43  <221> NAME/KEY: MISC_FEATURE
44  <222> LOCATION: (16)..(16)
45  <223> OTHER INFORMATION: Applicants herein disclose Leu and Gln sequence variants at
this
46         position
48  <220> FEATURE:
49  <221> NAME/KEY: MISC_FEATURE
50  <222> LOCATION: (18)..(18)
51  <223> OTHER INFORMATION: Applicants herein disclose Met and Leu sequence variants at
this
52         position
54  <220> FEATURE:
```

```
55 <221> NAME/KEY: MISC_FEATURE
56 <222> LOCATION: (21)..(21)
57 <223> OTHER INFORMATION: Applicants herein disclose Gly, Asp, Ala and Val sequence
58         variants at this position
```

RAW SEQUENCE LISTING   DATE: 04/27/2004
PATENT APPLICATION: US/09/506,079H   TIME: 09:52:36

Input Set : **A:\49321-16.ST25.txt**
Output Set: **N:\CRF4\04272004\I506079H.raw**

```
      60 <220> FEATURE:
      61 <221> NAME/KEY: MISC_FEATURE
      62 <222> LOCATION: (36)..(36)
      63 <223> OTHER INFORMATION: Applicants herein disclose Leu and Ile sequence variants at
this
      64       position
      66 <220> FEATURE:
      67 <221> NAME/KEY: MISC_FEATURE
      68 <222> LOCATION: (54)..(54)
      69 <223> OTHER INFORMATION: Applicants herein disclose Pro and Arg sequence variants at
this
      70       position
      72 <220> FEATURE:
      73 <221> NAME/KEY: MISC_FEATURE
      74 <222> LOCATION: (64)..(64)
      75 <223> OTHER INFORMATION: Applicants herein disclose Pro and Leu sequence variants at
this
      76       position
      78 <220> FEATURE:
      79 <221> NAME/KEY: MISC_FEATURE
      80 <222> LOCATION: (73)..(73)
      81 <223> OTHER INFORMATION: Applicants herein disclose Asp and Asn sequence variants at
this
      82       position
      84 <400> SEQUENCE: 1
W--> 86 Gly Xaa His Ser Xaa Xaa Pro Arg Pro Ala Ala Val Pro Val Pro Xaa
     87 1               5                   10                  15
     90 Arg Xaa Gln Pro Xaa Pro Ala His Pro Val Leu Ser Phe Leu Arg Pro
     91             20                  25                  30
     94 Ser Trp Asp Xaa Val Ser Ala Phe Tyr Ser Leu Pro Leu Ala Pro Leu
     95         35                  40                  45
     98 Ser Pro Thr Ser Val Xaa Ile Ser Pro Val Ser Val Gly Arg Gly Xaa
     99     50                  55                  60
    102 Asp Pro Asp Ala His Val Ala Val Xaa Leu Ser Arg Tyr Glu Gly
    103 65              70              75
    106 <210> SEQ ID NO: 2
    107 <211> LENGTH: 419
    108 <212> TYPE: PRT
    109 <213> ORGANISM: Homo sapiens
    112 <220> FEATURE:
    113 <221> NAME/KEY: MISC_FEATURE
    114 <222> LOCATION: (342)..(342)
    115 <223> OTHER INFORMATION: Applicants herein disclose Thr and Ser sequence variants at
this
    116       position
    118 <220> FEATURE:
    119 <221> NAME/KEY: MISC_FEATURE
    120 <222> LOCATION: (345)..(345)
    121 <223> OTHER INFORMATION: Applicants herein disclose Leu and Pro sequence variants at
this
    122       position
    124 <220> FEATURE:
    125 <221> NAME/KEY: MISC_FEATURE
```

126 <222> LOCATION: (346)..(346)
127 <223> OTHER INFORMATION: Applicants herein disclose Pro and Leu sequence variants at this

RAW SEQUENCE LISTING   DATE: 04/27/2004
PATENT APPLICATION: US/09/506,079H   TIME: 09:52:36

Input Set : A:\49321-16.ST25.txt
Output Set: N:\CRF4\04272004\I506079H.raw

```
128      position
130 <220> FEATURE:
131 <221> NAME/KEY: MISC_FEATURE
132 <222> LOCATION: (356)..(356)
133 <223> OTHER INFORMATION: Applicants herein disclose Leu and Gln sequence variants at
this
134      position
136 <220> FEATURE:
137 <221> NAME/KEY: MISC_FEATURE
138 <222> LOCATION: (358)..(358)
139 <223> OTHER INFORMATION: Applicants herein disclose Met and Leu sequence variants at
this
140      position
142 <220> FEATURE:
143 <221> NAME/KEY: MISC_FEATURE
144 <222> LOCATION: (361)..(361)
145 <223> OTHER INFORMATION: Applicants herein disclose Gly, Asp, Ala and Val sequence
146      variants at this position
148 <220> FEATURE:
149 <221> NAME/KEY: MISC_FEATURE
150 <222> LOCATION: (376)..(376)
151 <223> OTHER INFORMATION: Applicants herein disclose Leu and Ile sequence variants at
this
152      position
154 <220> FEATURE:
155 <221> NAME/KEY: MISC_FEATURE
156 <222> LOCATION: (394)..(394)
157 <223> OTHER INFORMATION: Applicants herein disclose Pro and Arg sequence variants at
this
158      position
160 <220> FEATURE:
161 <221> NAME/KEY: MISC_FEATURE
162 <222> LOCATION: (404)..(404)
163 <223> OTHER INFORMATION: Applicants herein disclose Pro and Leu sequence variants at
this
164      position
166 <220> FEATURE:
167 <221> NAME/KEY: MISC_FEATURE
168 <222> LOCATION: (413)..(413)
169 <223> OTHER INFORMATION: Applicants herein disclose Asp and Asn sequence variants at
this
170      position
172 <400> SEQUENCE: 2
174 Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu
175 1               5                   10                  15
178 Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
179              20                  25                  30
182 Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
183          35                  40                  45
186 Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
187      50                  55                  60
190 Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
191 65                  70                  75                  80
```

194 Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
195   85   90   95

RAW SEQUENCE LISTING   DATE: 04/27/2004
PATENT APPLICATION: US/09/506,079H   TIME: 09:52:36

Input Set : A:\49321-16.ST25.txt
Output Set: N:\CRF4\04272004\I506079H.raw

```
198 Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
199             100                 105             110
202 Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
203         115             120             125
206 Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
207     130             135             140
210 Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
211 145             150             155                 160
214 Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
215             165             170             175
218 Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
219         180             185             190
222 His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
223         195             200             205
226 Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
227     210             215             220
230 Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
231 225             230             235                 240
234 Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
235             245             250             255
238 His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
239             260             265             270
242 Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
243         275             280             285
246 Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
247     290             295             300
250 Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
251 305             310             315                 320
254 Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
255             325             330             335
W--> 258 Pro Cys Ala Arg Gly Xaa His Ser Xaa Xaa Pro Arg Pro Ala Ala Val
259             340             345             350
262 Pro Val Pro Xaa Arg Xaa Gln Pro Xaa Pro Ala His Pro Val Leu Ser
263         355             360             365
266 Phe Leu Arg Pro Ser Trp Asp Xaa Val Ser Ala Phe Tyr Ser Leu Pro
267     370             375             380
270 Leu Ala Pro Leu Asp Pro Thr Ser Val Xaa Ile Ser Pro Val Ser Val
271 385             390             395                 400
274 Gly Arg Gly Xaa Asp Pro Asp Ala His Val Ala Val Xaa Leu Ser Arg
275             405             410             415
278 Tyr Glu Gly
282 <210> SEQ ID NO: 3
283 <211> LENGTH: 19
284 <212> TYPE: DNA
285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: HER-2-specific oligonucleotide primer
290 <400> SEQUENCE: 3
291 tgagcaccat ggagctggc                                          19
```

RAW SEQUENCE LISTING   DATE: 04/27/2004
PATENT APPLICATION: US/09/506,079H   TIME: 09:52:36

Input Set : A:\49321-16.ST25.txt
Output Set: N:\CRF4\04272004\I506079H.raw

294 <210> SEQ ID NO: 4
295 <211> LENGTH: 22
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: HER-2-specific oligonucleotide primer
302 <400> SEQUENCE: 4
303 tccggcagaa atgccaggct cc   22
306 <210> SEQ ID NO: 5
307 <211> LENGTH: 22
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: HER-2 cDNA-specific oligonucleotide primer
314 <400> SEQUENCE: 5
315 aacacagcgg tgtgagaagt gc   22
318 <210> SEQ ID NO: 6
319 <211> LENGTH: 21
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial Sequence
323 <220> FEATURE:
324 <223> OTHER INFORMATION: HER-2 ECDIIIa-region-specific oligonucleotide primer
326 <400> SEQUENCE: 6
327 ataccgggac aggtcaacag c   21
330 <210> SEQ ID NO: 7
331 <211> LENGTH: 20
332 <212> TYPE: DNA
333 <213> ORGANISM: Artificial Sequence
335 <220> FEATURE:
336 <223> OTHER INFORMATION: HER-2 ECDIIIa-region-specific oligonucleotide primer
338 <400> SEQUENCE: 7
339 tctgggtacc cactcactgc   20
342 <210> SEQ ID NO: 8
343 <211> LENGTH: 22
344 <212> TYPE: DNA
345 <213> ORGANISM: Artificial Sequence
347 <220> FEATURE:
348 <223> OTHER INFORMATION: HER-2 exon-specific oligonucleotide primer
350 <400> SEQUENCE: 8
351 ttcacactgg cacgtccaga cc   22
354 <210> SEQ ID NO: 9
355 <211> LENGTH: 27
356 <212> TYPE: DNA
357 <213> ORGANISM: Artificial Sequence
359 <220> FEATURE:
360 <223> OTHER INFORMATION: HER-2 cDNA-specific oligonucleotide primer
362 <400> SEQUENCE: 9
363 gcacggatcc atagcagact gaggagg   27
366 <210> SEQ ID NO: 10

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 04/27/2004
PATENT APPLICATION: **US/09/506,079H**   TIME: 09:52:37

Input Set : **A:\49321-16.ST25.txt**
Output Set: **N:\CRF4\04272004\I506079H.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2,5,6,16,18,21,36,54,64,73
Seq#:2; Xaa Pos. 342,345,346,356,358,361,376,394,404,413
Seq#:10; N Pos. 62
Seq#:10; Xaa Pos. 2,5,6,16,18,21,36,54,64,73

VERIFICATION SUMMARY   DATE: 04/27/2004
PATENT APPLICATION: US/09/506,079H   TIME: 09:52:37

Input Set : A:\49321-16.ST25.txt
Output Set: N:\CRF4\04272004\I506079H.raw

L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
M:341 Repeated in SeqNo=1
L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:336
M:341 Repeated in SeqNo=2
L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:48
M:341 Repeated in SeqNo=10